

AMENDMENTS TO THE CLAIMS

Claims 1-52 (Cancelled)

53. (New) A database and data processing system for finding a disease-influencing gene among individuals having a risk factor for a disease, the database and data processing system comprising:

- a) a server for storing queries regarding the individuals' behavior, symptoms, environment and disease progression and for storing the individuals' responses to the queries;
- b) at least one remotely programmable apparatus identified with each individual in communication with the server, wherein the remotely programmable apparatus comprises:
 - i) a user interface for communicating the queries to the individuals and for receiving the responses; and
 - ii) a communication means for receiving the queries from the server and for transmitting the responses to the server;
- c) a data mining means in communication with the server, wherein the data mining means includes:
 - i) means for analyzing the responses in order to group individuals having a similar symptom, behavioral and environmental profile, and a similar disease progression; and

- ii) means for analyzing the responses in order to group individuals having a similar genotype.

54. (New) The system of claim 53, wherein the queries are script-based and are adjustable to each individual.

55. (New) The system of claim 53, wherein the queries to the individual are adjusted with a script generator based upon the responses received from an individual.

56. (New) The system of claim 53, wherein the queries collect phenotypic information associated with known genetic markers.

57. (New) The system of claim 53, wherein the communications apparatus is connectable with a monitoring device configured to acquire physiological data.

58. (New) The system of claim 57, wherein the monitoring device is selected from the group consisting of a blood glucose meter, a respiratory flow meter, a blood pressure cuff, a weight scale and a pulse meter.

59. (New) The system of claim 53, wherein the disease is selected from the group consisting of non-insulin dependent diabetes, sickle cell anemia, cystic fibrosis, asthma, malignant melanoma, breast cancer, ovarian cancer, colon cancer and obesity.

60. (New) A database and data processing system for use in finding a disease-influencing substance among individuals having a risk factor for a disease, the database and data processing system comprising:

- a) a server for storing queries regarding the individuals' behavior, symptoms environment and disease progression and for storing the individuals' responses to the queries;
- b) at least one remotely programmable apparatus identified with each individual in communication with the server, wherein the remotely programmable apparatus comprises:
 - i) a user interface for communicating the queries to the individuals and for receiving the responses; and
 - ii) a communication means for receiving the queries from the server and for transmitting the responses to the server;
- c) a data mining means in communication with the server, wherein the data mining means includes:
 - i) means for analyzing the responses in order to group individuals having a similar symptom, behavioral and environmental profile, and a similar disease progression; and
 - ii) means for identifying the disease influencing substance.

61. (New) The system of claim 60, wherein the queries are script-based and are adjustable to each individual.

62. (New) The system of claim 60, wherein the queries to the individual are adjusted with a script generator based upon the responses received from an individual.

63. (New) The system of claim 60, wherein the queries collect phenotypic information associated with known genetic markers.

64. (New) The system of claim 60, wherein the communications apparatus is connectable with a monitoring device configured to acquire physiological data.

65. (New) The system of claim 64, wherein the monitoring device is selected from the group consisting of a blood glucose meter, a respiratory flow meter, a blood pressure cuff, a weight scale and a pulse meter.

66. (New) The system of claim 60, wherein the disease is selected from the group consisting of non-insulin dependent diabetes, sickle cell anemia, cystic fibrosis, asthma, malignant melanoma, breast cancer, ovarian cancer, colon cancer and obesity.

67. (New) A database and data processing system for finding a disease-influencing gene among individuals having a risk factor for a disease, the database and data processing system comprising:

- a) a server for storing queries regarding the individuals' behavior, symptoms, environment and disease progression and for storing the individuals' responses to the queries;

- b) at least one remotely programmable apparatus identified with each individual in communication with the server, wherein the remotely programmable apparatus comprises:
 - i) a user interface for communicating the queries to the individuals and for receiving the responses; and
 - ii) a communication device for receiving the queries from the server and for transmitting the responses to the server;
- c) a computer program accessible to the server, wherein the computer program analyzes the responses to the queries and groups the individuals having similar symptom, behavioral, and environmental profiles; similar disease progression; and similar genotypes.

68. (New) A database and data processing system for finding a disease-influencing substance among individuals having a risk factor for a disease, the database and data processing system comprising:

- a) a server for storing queries regarding the individuals' behavior, symptoms, environment and disease progression and for storing the individuals' responses to the queries;
- b) at least one remotely programmable apparatus identified with each individual in communication with the server, wherein the remotely programmable apparatus comprises:
 - i) a user interface for communicating the queries to the individuals and for receiving the responses; and

- ii) a communication device for receiving the queries from the server and for transmitting the responses to the server;
- c) a computer program accessible to the server, wherein the computer program analyzes the responses to the queries and groups the individuals having similar symptom, behavioral, and environmental profiles; similar disease progression; and similar genotypes.